

REMARKS

The office action of November 13, 2008 has been reviewed and these remarks are responsive thereto. Claims 15-17, 20-30, 34, 39, 42, 48, 55 and 62 have been amended. No new matter has been added. Claims 2-4, 6-17, 20-30, 32-39, 42-46, 48-51, 53-56 and 60-73 are pending in the application. Reconsideration and allowance of the instant application are respectfully requested.

Rejections Under 35 U.S.C. § 112

Claims 2-4, 6-17, 20-30, 32-39, 42-46, 48-56 and 60-73 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the enablement requirement. More particularly, the Action contends that the disclosure fails to teach how one would know how to weight the nodes, how they are weighted with respect to a user's interest, and how the second nodes correspond to the first nodes. Applicants respectfully traverse these rejections.

Applicants respectfully submit that that paragraph [0085], reproduced below, and FIGs. 11 and 18, among other portions of the specification, describe how to weight the nodes (e.g., by explicit user choice or via algorithms), how they are weighted with respect to user interests (node weights may range from 1-10 points, where 1 indicates weak interest and 10 indicates strong interest) and how the second nodes correspond to the first nodes (a comparison of FIG. 11 (showing first nodes) and FIG. 18 (showing second nodes), illustrates one example of how the second nodes correspond to the first nodes). More particularly, one example of how the second nodes correspond to the first nodes is that each second node corresponds to a first node with the same name in a 1-to-1 fashion.

[0085] Each node in the PIG contains a weighting indicating the degree to which the user is interested in the concept. Nodes in the computed PIG that have a larger weighting may be considered to be of greater interest to the user. The nodes in the ontology do not have weights associated with them. Nodes in the profile, however, are weighted. Characteristic data may be initially be weighted by explicit user choice, or via algorithms. For example, node weights may range from 1-10 points, where 1 indicates weak interest and 10 indicates strong interest. For the purposes of illustration, the weight range of 1-10 will be used and referenced throughout this invention. Characteristic data that is imported into the knowledge warehouse may be initialized with a medium interest level, for example. A domain expert may choose to weight different user data with various weights. Also, users may explicitly make choices as to their interests and thus affect how the weights are changed in the characteristic data. Once the characteristic data is weighted, it may be used as input to the inferencing engine to compute the PIG.

(Emphasis added). On pages 9 and 10, the Action states the following in response to Applicants' argument made in the previously submitted Response of July 24, 2008.

The level of predictability in the art of making "recommendations" is not something that can be readily anticipated. One skilled in the art would not be able to readily anticipate and predict what certain changes would have on the outcome of the current scope of the claims. Second, as applicant admits there are various ways in which on[e] could weight node[s] via explicit/implicit choices and/or algorithms. This begs the question how would one skilled in the art know which "embodiment" the applicant used to obtain the outcome without doing any type of experimentation...The Examiner questions how one would know to use either one of limitless algorithms to produce a recommendation or whether they are supposed to use explicit/implicit choices of the user.

Applicant respectfully submits that the relevant art is predictable. MPEP 2164.03 states that predictability in the arts refers to the ability of one skilled in the art to extrapolate the disclosed or known results to the claimed invention. That is, if one skilled in the art can readily anticipate the *effect* of a change within the subject matter to which the claimed invention pertains, then there is predictability in the arts. Changing an algorithm or other mechanism for applying a weight yields predictable results. Low user interest corresponds to a low weight value whereas high user interest corresponds to a high weight value. A variation to the exact scale used does not render the claim unpredictable because the *effect* of any change would be well understood by one skilled in the art. If for example, one skilled in the art chooses to weight nodes on a 11-20 scale instead of the 1-10 scale explained in paragraph [0085], it would be predictably expected that an item receiving a "10" under the explained scale might now be given a "20" rating.

The Action also contends that one skilled in the art would not understand which embodiment the applicants used to obtain the outcome without any experimentation. However, paragraph [0085] explicitly clarifies that "[f]or the purposes of illustration, the weight range of 1-10 will be used and referenced throughout this invention." Furthermore, as described above, any changes to the illustration used is within the scope of the invention and does not require undue experimentation because one of ordinary skill in the arts would understand the effect of such changes. That is, one of ordinary skill would understand that higher interest items are given more weight, regardless of the exact algorithm or scale used.

As such, applicants respectfully submit that the claims comply with 35 U.S.C. § 112, first paragraph. Accordingly, applicants respectfully request that the rejection be withdrawn.

Rejections Under 35 U.S.C. § 101

Claims 20-25 stand rejected under 35 U.S.C. § 101, because the claimed invention is allegedly directed to non-statutory subject matter. Applicants respectfully traverse these rejections.

Notwithstanding the validity of such a rejection, claims 20-25 have been amended to recite “a computer-implemented method” to more explicitly tie the claims to a particular machine and/or to show that the claims transform the data. For at least these reasons, Applicants respectfully request reconsideration and withdrawal of these rejections.

Rejections Under 35 U.S.C. § 103

Claims 2-4, 6-17, 20-23, 25-31, 32-39, 42-46, 48-51, 53, 55-56, 60-67 and 68-73 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Pat. No. 6,151,584 to Papierniak et al. (“Papierniak”) in view of U.S. patent no. 6,317,722 to Jacobi et al. (“Jacobi”). Applicants respectfully traverse.

Amended claim 25 recites, *inter alia*,

wherein at least one particular weighted second node is generated dependent on another particular weighted second node being generated.

Such a feature is not disclosed in either Papierniak or Jacobi. The action concedes that Papierniak fails to teach or suggest the feature of second nodes. As such, it follows accordingly that Papierniak also fails to teach or suggest that at least one particular weighted second node is generated dependent on another particular weighted second node being generated as recited in claim 25.

Moreover, Jacobi fails to cure the deficiency of Papierniak. Assuming, but not conceding, that a known item of Jacobi constitutes a first node, and an item of similar interest of Jacobi constitutes a second node, Jacobi merely describes that the each item in the similar items list is stored together with a commonality index (“CI”) value which indicates the relatedness of that item to the known item of interest. See Jacobi, col. 9, line 59 – col. 10, lines 10. Significantly, Jacobi is limited to only comparisons between a known item of interest and a potential similar item. Indeed, it is not surprising that Jacobi is completely devoid of any description that the similar items included in the table are generated dependent on another similar item in the table. As such, Jacobi fails to teach or suggest the claim 25 feature of at least one particular weighted second node is generated dependent on another particular weighted second node being generated.

Therefore, even assuming, but not conceding that a combination of Paperniak and Jacobi is proper, such a combination fails to teach or suggest each and every feature of amended claim 25. Accordingly, claim 25 is patentably distinct from Paperniak and Jacobi.

Claims 34, 42, 48, 55 and 62 have been amended to recite features similar to those recited in claim 25. As such, they are patentably distinct from Paperniak and Jacobi for at least reasons similar to those discussed above with respect to claim 25.

Claims 2-4, 6-17, 20-23, 26-31, 32-33, 35-39, 43-46, 49-51, 53, 56, 60-61, 63-67 and 68-73 ultimately depend on claims 25, 34, 42, 48, 55 and 62 and are allowable for at least the same reasons as their base claims in addition to the advantageous features recited therein.

For example, claim 45 recites, *inter alia*, receiving user data relating to a de-identified user; and authenticating said de-identified user. The action alleges that such a feature is disclosed at col. 14¹, lines 65-67 of Paperniak. However, it is not clear to the applicant how deletion of data is being interpreted to constitute *authenticating a de-identified user* as recited in claim 45. Indeed, deleting data is completely distinct in subject matter to authenticating a de-identified user. As such, deleting data in an appropriate time as disclosed at col. 14, lines 65-67 of Paperniak fails to constitute the features of claim 45. Moreover, the rest of Paperniak is completely devoid of any mention, let alone teaching or suggestion of the feature of user data relating to a de-identified user and authenticating said de-identified user as recited in claim 45.

Furthermore, Jacobi fails to cure the deficiencies of Paperniak. Jacobi is not alleged to, and indeed fails to teach or suggest the features of claim 45. As such, even assuming but not conceding that such a combination is proper, the combination fails to result in each and every feature of claim 45.

Claims 44 and 46 also recite features related to de-identification which, as discussed above, is not disclosed in either Paperniak or Jacobi. As such, these claims are independently allowable over a combination of Paperniak and Jacobi for this additional reason.

Claims 24, 51 and 54 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Papierniak and Jacobi, and further in view of Financialengines.com.

Claims 24, 51 and 54 depend on claims 25, 48 and 55. Financialengines.com fails to cure the deficiencies of Paperniak and Jacobi, nor was it relied upon to do so, with respect to claims 25,

¹ The Action cited col. 15, lines 65-67, but this appears to be a clerical error.

48 and 55. As such, even assuming, but not conceding that a combination of Paperniak, Jacobi, and Financialengines.com is proper, such a combination fails to result in the features of claims 25, 48 and 55. As such, claims 24, 51 and 54 are patentably distinct from Paperniak, Jacobi, and Financialengines.com.

Conclusion

Based on the foregoing, Applicants respectfully submit that the application is in condition for allowance and a Notice to that effect is earnestly solicited. Should the Examiner believe that anything further is desirable in order to place the application in even better form for allowance, the Examiner is respectfully urged to contact Applicants' undersigned representative at the below-listed number.

Respectfully submitted,

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